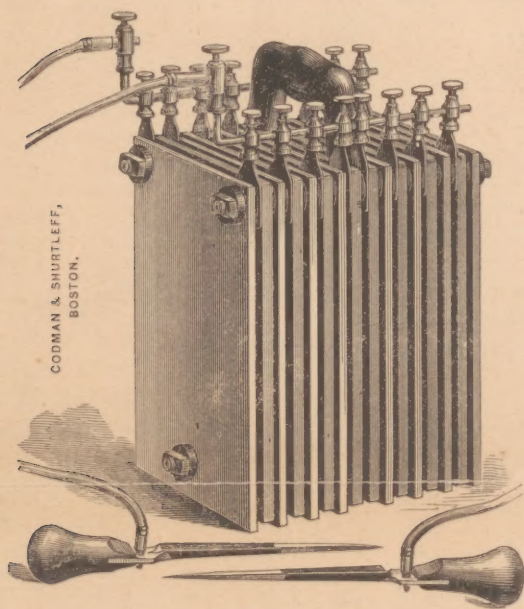


# RESULTS OF THIRTY-SIX CASES OF UTERINE FIBROIDS, TREATED BY ELECTROLYSIS.

INSTITUTED BY DRS. GILMAN KIMBALL, OF LOWELL, AND EPHRAIM CUTTER, OF CAMBRIDGE, MASS.  
AUGUST 21, 1871.



BATTERY AND ELECTRODES. Cutter.

Eight pairs carbon and zinc plates 6 by 9 inches. Electrodes specially invented for this operation, and designed for the certain and controllable penetration of dense fibroids. Length over all,  $7\frac{1}{2}$  inches; blade,  $5\frac{1}{4}$  inches.



METHOD OF PUNCTURE, Kimball.  
a, b, abdominal outline.

Time consumed by operation in passage of constant current, three to fifteen minutes.

*Design.*—Simply hoped to arrest further development. *Number of Applications.*—One to nineteen. *Frequency.*—Once every day to once in two months. *Exciting Fluid.*—Saturated solution of potassic bichromate, with sulphuric acid  $\frac{3}{4}$  to  $\frac{3}{8}$  j.

CASE I. Reported by Dr. W. S. Brown, of Stoneham, Mass. *Phila. Med. & Surg. Reporter*, Feb. 8, 1873. Myo-fibroid. Application incomplete; no results. Patient dissatisfied.

II. Very large fibro-myoma, ascites, orthopnea and general malaise. Tumor diminished; ascites and orthopnea relieved at once; astonishing flow of urine.

III. Large tumor; had given up to die. Three operations of three minutes each, followed by entire disappearance and permanent cure.

IV. Large tumor; growth arrested; not diminished. Patient much relieved.

V. Large tumor. Diminished one-half.

VI. Large fibro-myoma. Arrested for two years and then remarkably diminished; many applications.

VII. Large tumor. Patient bed-ridden. After two applications, very much diminished with such relief that she was able to be up and about the house. In a week's time, she rode out in a carriage comfortably, and went about town as well as ever she did. Two years afterwards, tumor returned to its former size, but the patient was in a good state of health.

VIII. No effect; tumor proved malignant.

IX. Peritoneal; no effect. Pedunculated. Afterward successfully removed by gastrotomy by Kimball.

X. Peritoneal. Tumor large. Fatal case. Extreme exhaustion, with typhoid symptoms. Death occurred four weeks after operation.

XI. Enormous growth; no impression.

XII. Enormous growth; not sensibly diminished. Arrested; much relieved. Able to cross her lower limbs and tie up her shoes—both of which were impossible before electrolysis.

XIII. Large tumor. Sensibly reduced.

XIV. Large tumor. Sensibly reduced.

XV. Large tumor. Growth arrested.

XVI. Enormous. Sensibly reduced.

XVII. Large tumor. Marked relief; diminished. Could put on her boots, which before she could not.

XVIII. Small tumor. No relief; not arrested.

XIX. Large pelvic growth. No relief; not arrested.

XX. Large growth. Great relief; sensibly reduced.

XXI. Small tumor. Entirely disappeared.

XXII. Medium growth. No relief; proved to be malignant.

XXIII. Enormous growth. Nineteen applications; very much diminished.

XXIV. Enormous growth. No relief; not arrested.

XXV. Hopeless case. Tumor very large; ascites and a parietal abscess between umbilicus and pubis. Arrested. Patient asserted great relief.

XXVI. Medium size; fibro-cystic. Not arrested; no relief.

XXVII. Single woman, large as a parous woman at term. Now no enlargement is noticed. Obligated to give up teaching; now has resumed it. Pain recurred and was annulled by one operation.

XXVIII. Large tumor. Diminished to one-third its former size.

XXIX. Large multilobar fibro-myoid pelvic. Diminished somewhat. Remarkable relief to pain. Restoration to active life.

XXX. Multilobar pelvic fibro-myoma. Fatal. Died in eleven days, from peritonitis. She was weaker than she appeared. A morphine eater; used  $\frac{3}{4}$  i. a week sometimes.

XXXI. Large multilobar; very dense. Diminished one-third. Softened; ten operations; general health restored.

XXXII. Enormous multilobar tumor; ascites. Diminished somewhat; dropsy cured; general health improved. In progress.

XXXIII. Multilobar, large, dense. Diminished somewhat. From a state of dependent invalidism, she was enabled to rise to a position of self support, by her own labor.

XXXIV. Quite large tumor. Patient an invalid, and had given up her position as house servant. Diminished; she returned to work for one year, and then died from hæmorrhage.

XXXV. Large pelvic tumor. One operation diminished it one-half. Subsequently it disappeared.

XXXVI. Fibro-myoma, pelvic, multilobar; one operation, fifteen minutes. Great prostration; skin peeled from hands. Slightly diminished. Perfect relief from constipation of at least ten years standing, lasting two months. Able to retain urine all night. Great improvement in sleep.

*Resumé.*—Growths arrested in 26 cases (this counts diminutions and disappearances as arrests); not arrested in 10. Growths diminished, 23; not diminished, 13. Malignant, 2. Fatal, 2. No effect, 4. Disappeared entirely, 3. Large majority relieved. A full account of these operations is in preparation for publication.

Cambridge, Nov. 1, 1876.

